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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BANNER & WITCOFF LTD.,
ATTORNEYS FOR MICROSOFT
1001 G STREET , N.W.
ELEVENTH STREET
WASHINGTON, DC 20001-4597

EXAMINER	
PERUNGAVOOR, SATHYANARAYA V	
ART UNIT	**PAPER NUMBER**
2625	

DATE MAILED: 01/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/852,799	DRESEVIC ET AL.	
	Examiner	Art Unit	
	Sath Perungavoor	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05/11/2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/1/01, 12/30/03, 7/15/04, 8/17/04, 12/8/04*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites the functional descriptive matter (data structure).

Similarly claims 2-13 are rejected as being dependent on claim 1.

Claim 14 recites the functional descriptive matter (data structure).

Similarly claims 15-16 are rejected as being dependent on claim 14.

Claim 17 recites the functional descriptive matter (data structure).

Claim 18 recites the functional descriptive matter (data structure).

Similarly claim 19 is rejected as being dependent on claim 18.

Claims 20-25 recite the functional descriptive matter (data structure).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 5-7, 10-12, 17, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by QuickTime (NPL document, see PTO-892).

Regarding claim 1, QuickTime discloses a computer readable medium having a data structure thereon for storing an ink object, said data structure comprising (Title; It is well known that the Macintosh computer would have a computer readable medium.):

a first portion having an ink object identifier (Page 1; gxPath structure);

a second portion identifying a size or count of tag data (Page 1; vectors);

and a third portion having the tag data (Page 1; vector).

Regarding claim 3, QuickTime discloses the computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing global properties (Page 4; gxColor can be applied both locally and globally.).

Regarding claim 5, QuickTime discloses the computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion

describing an ink space rectangle (Page 3; gxPoint; Cited reference discloses the creation of a virtual coordinate space.).

Regarding claim 6, QuickTime discloses the computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing drawing attributes (Page 13).

Regarding claim 7, QuickTime discloses the computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing stroke descriptors (Pages 6-7; Geometric Pen).

Regarding claim 10, QuickTime discloses the computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing local properties (Page 4; gxColor can be applied both locally and globally.).

Regarding claim 11, QuickTime discloses the computer readable medium according to claim 1, wherein said data structure further comprises a fourth portion describing a drawing attribute index (Page 13; Fig. 11; Disclosed contour is performed through an array and would include an index, as can be seen in Fig. 11.).

Regarding claim 12, QuickTime discloses the computer readable medium according to claim 1, wherein said data structure is encoded (Page 9; Vector Codec).

Regarding claim 17, all limitations are set forth and rejected as per discussion for claims 1 and 5.

Regarding claim 20, all limitations are set forth and rejected as per discussion for claims 1. QuickTime implies the table structure, since data is indexed. QuickTime discloses a transform for at least one ink source (Page 11-12; Transfer Mode).

Regarding claim 21, all limitations are set forth and rejected as per discussion for claims 1 and 6. QuickTime implies the table structure, since data is indexed.

3. Claims 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Hansen, Jr. et al. (5,534,893).

Regarding claim 24, Hansen, Jr. et al. disclose a system for creating a data structure comprising:

an input configured to receive ink strokes (20 on Fig. 1);

a processor configured to parse the received ink strokes and to determine at least one property associated with the ink strokes (12 on Fig. 1; Col. 8 Lines 36-37); and

a storage configured to store the ink strokes in a data structure with at least one tag identifying in said at least one property (16 on Fig. 1; Col. 8 Lines 36-49).

Regarding claim 25, all limitations are set forth and rejected as per discussion for claim 24.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over QuickTime in view of XML Schema (NPL document, see PTO-892).

QuickTime meets the claim limitations set forth in the discussion for claim 1.

However, QuickTime does not disclose a portion relating to the version of the ink object.

XML Schema discloses a portion relating to the version of the object (Page 2; Example).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teaching of QuickTime with XML Schema to further meet the claim limitations. Since both describe data structures and any number of fields can be added to a data structure. One would add the version information to decide compatibility between applications.

5. Claims 4, 8, 13-16, 18, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over QuickTime in view of Hansen, Jr. et al.

Regarding claim 4, QuickTime meets the claim limitations set forth in the discussion for claim 1.

However, QuickTime does not expressly disclose a portion describing a global unique identifier.

Hansen, Jr. et al. disclose a portion describing a global unique identifier (Col. 8 Lines 47-49).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teaching of QuickTime with Hansen, Jr. et al. to further meet the claim limitations. Global identifiers are commonly known, such as an IP address, which uniquely identifies a device in a network. Since, data structures allow for adding of as many fields as needed, one would add global identifiers.

Regarding claim 8, QuickTime meets the claim limitations set forth in the discussion for claim 1.

However, QuickTime does not expressly disclose a portion describing metrics.

Hansen, Jr. et al. disclose a portion describing metrics (Col. 7 Lines 24-26 and 47-51; The conversion of z position/pressure values to thickness or darkness of lines would require some metrics.).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teaching of QuickTime with Hansen, Jr. et al. to further meet the claim limitations. Data structures allow for adding of as many fields as needed, one

would add metrics. Since, conversion is necessary for data to have meaning before processing.

Regarding claim 13, all limitations are set forth and rejected as per discussion for claim 4.

Regarding claim 14, all limitations are set forth and rejected as per discussion for claims 1 and 4. Both QuickTime and Hansen Jr. et al. imply the table structure, since data is indexed.

Regarding claim 15, all limitations are set forth and rejected as per discussion for claims 1 and 4. Determination of global unique identifiers by position in a table is inherent of indexed data.

Regarding claim 16, all limitations are set forth and rejected as per discussion for claims 1 and 4.

Regarding claim 18, all limitations are set forth and rejected as per discussion for claims 1 and 8. Both QuickTime and Hansen Jr. et al. imply the table structure, since data is indexed.

Regarding claim 19, all limitations are set forth and rejected as per discussion for claim 18. Hansen Jr. et al. discloses stroke properties relating to metrics (Col. 8 Lines 37-49).

Regarding claim 23, Hansen Jr. et al. discloses a method for using a data structure for storing ink comprising the steps of (Col. 9 Lines 28-38):

identifying a tag in the data structure (Col. 9 Lines 28-38);

if an application can use tag, then reading the data associated with the tag, otherwise skipping the tag (Col. 9 Lines 28-38)

However, Hansen Jr. et al does not disclose retrieving a size or count of data associated with the tag.

QuickTime does disclose retrieving a size or count of data associated with the tag (Page 1; vectors).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teaching(s) of Hansen Jr. et al. with QuickTime to perform skipping past the data based on the size or count of the data. Since, all data is indexed one could easily create count values by determining the index values occupied by a particular tag. Once the count is determined it would be faster to skip over than traverse through information.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over QuickTime in view of Hamilton (NPL document, see PTO-892).

QuickTime meets the claim limitations set forth in the discussion for claim 1.

However, QuickTime does not expressly disclose a portion describing the compression used.

Hamilton discloses a portion describing the compression used (Page 1, APPO).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teaching of QuickTime with Hamilton to further meet the claim limitations. Adding identifiers to data in order to describe the compression used is commonly known in encryption keys. Since, data structures allow for adding of as many fields as needed, one would add compression method identifiers. This would be used in cases where many different compression algorithms are used.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen, Jr. et al.

Hansen, Jr. et al. discloses a method for creating a data structure for storing ink comprising the steps of (Fig. 1):

receiving ink strokes (20 on Fig. 1);

determining at least one ink property associated with the ink strokes (Col.8 Lines 36-37);

creating a data structure with one representation of the ink property (Col. 8 Lines 37-49)

However, Hansen, Jr. et al. does not expressly disclose determining if the ink property applies to at least two ink strokes.

Hansen, Jr. et al. do disclose monitoring strokes and stylus type (Col. 8 Lines 37-49; Col. 7 Lines 64-65).

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teaching of Hansen, Jr. et al. to further meet the claim limitations. When monitoring the strokes and stylus type, one can easily determine, when two strokes have the same property. When at least two strokes are created with same stylus, then property is same for both strokes.

Other Prior Art Cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Martin et al. (US 5,148,155) disclose the development of ink objects.

Beernink et al. (US 5,680,480) disclose the development of ink objects.

Nowlan et al. (US 5,920,647) disclose the development of ink objects.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sath Perungavoor whose telephone number is (703) 306-4116. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta whose telephone number is (703) 308-5246, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sath Perungavoor
Art Unit 2625
January 4, 2005

KANUBHAI PATEL
PRIMARY EXAMINER